On page 5, after line 3, insert the following heading:

a2 2. Description of the Prior Art

On page 7, after line 1, insert the following heading:

a3 3. Summary of the Invention

On page 7, replace the paragraphs beginning on lines 2 and 6 with the following:

a4 An object of the present invention is to provide an irradiation device for treating primary T cell mediated skin disorders which has fewer side effects than the prior art devices and in particular is also suitable for treating children.

a5 The object according to the present invention is met by an irradiation device for therapeutic and cosmetic purposes, including at least one optical radiation source which generates a first irradiance of at least 20 mW/cm^2 in the wavelength range of 400 to 440 and generates a second irradiance in the wavelength range of 300-400 of less than 21% of the first irradiance. The surprising activity of the radiation on the T cells in the range from 400 - 440 nm has made it possible to create an irradiation device for the treatment of primary T cell mediated skin disorders which on the one hand makes it possible to treat skin disorders which it has scarcely been possible to treat previously, such as lichen ruber, and on the other hand, since the carcinogenicity is lower by powers of 10 compared to UVA, also allows children to be treated. Its efficacy has already been impressively confirmed in clinical trials. In these trials, the test subjects were treated with irradiation doses of between 10 and 200 $joules/cm^2$, a preferred irradiation dose being 50 J/cm^2 in the wavelength range from 400 - 440 nm. Therefore, a further surprising effect is that a therapeutic effect is

established even at 8% compared to the irradiation doses which have previously be prescribed. Consequently, it is possible to achieve lower irradiances, on the one hand, and shorter treatment times, on the other hand. Furthermore, it has been found that, unlike the 15 appointments which were previously required, even 3-5 days of treatment are sufficient, and according to information given by the patients a noticeable improvement occurred even after the first treatment. The area of the patient which is to be irradiated is at a distance of between 0.2 and 3 m from the irradiation device.

On page 8, replace the paragraph beginning on line 23, with the following:

With an administered radiation dose of 50 J/cm^2 in the wavelength range from 400 - 440 nm, the radiation dose in the UVB range fluctuated between 25 - 150 mJ/cm^2. Despite these fluctuation bands, the UVB doses administered as a result lie considerably below the radiation doses from conventional UVB therapeutic techniques, which use starting doses of 200 mJ and increase to 800 mJ/cm^2 over the course of several weeks of treatment. The same applies, to a much greater extent, for the UVA ranges around 364 nm. However, it is impossible to rule out the possibility of small proportions of the UVB range around 313 nm having a synergistic effect on therapy in the wavelength range from 400 - 440 nm. This is currently the subject of further clinical trials, in which the effect and, if appropriate, thresholds for the irradiance and/or radiation dose for the 313 nm wavelength are to be determined. The same applies in a corresponding way to the UVA elements, although a synergistic effect can most likely be ruled out in this case.

On page 11, before the line 1, insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS;

a7

On page 11, before the line 28, insert the following heading:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS;

a8

On page 13, replace the paragraph starting on line 27, with the following:

a9

In addition, the casing tube 6 may be coated, on its inner side, with the phosphors which are known from low-pressure discharge lamps, in order in this way to transform additional components of the UVC radiation emitted by mercury into the wavelength range of 400 - 440 nm which is of interest. Since the phosphor itself has only low absorption in the range from 400 - 440 nm, it is in this way possible to effectively increase the emission in this wavelength range. A precondition for the use of blue phosphors in the evacuated casing tube, which may be filled with inert gas, is that the phosphor be cooled. Under normal operating conditions without cooling, the casing tube reaches up to 600°C. However, the efficiency of the bluephosphors drops greatly at temperatures above 100°C, so that they can only usefully be employed if the temperature is controlled at below 100°C, as can be achieved by means of the coolant unit described above. By using phosphors in combination with other dopants which preferably emit in the UV range in the quartz burner, it is possible to further increase the efficiency of the optical radiation source. Halide compounds of the metals selenium, antimony, zinc and cadmium are suitable for this purpose. Phosphors which may be used to coat the inside